

# Notice of Allowability

Application No.

09/632,809

Examiner

James A. Thompson

Applicant(s)

YAMAMOTO, AKIO

Art Unit

2625

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01 March 2006.
2. ☒ The allowed claim(s) is/are 22,23,28,30 and 31.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see page 6, filed 01 March 2006, with respect to the objections to the specification and the objections to the claims have been fully considered and are persuasive. The objections to the specification and the objections to the claims listed in items 5-8 of the previous office action, dated 28 December 2005 and mailed 04 January 2006, have been withdrawn. All formal matters have been overcome and there are no outstanding rejections or objections.

***Allowable Subject Matter***

2. Claims 22, 23, 28, 30 and 31 are allowed.

The following is an examiner's statement of reasons for allowance:

Independent claims 22, 28 and 30 recite producing a horizontally and vertically warped line pattern for the purpose of producing an engraving-style halftone image by performing the steps of: (a) obtaining brightness values of pixels along a series of lines extending in a first of the horizontal or vertical directions of the original image; (b) deriving a gray level distribution curve in response to the brightness values of the pixels along each of the lines; (c) determining the spacing between adjacent halftone dots of each gray level distribution curve such that the areas of the gray level distribution curve between the adjacent dots are substantially the same, each line being formed by a search window including the pixels in the line and a predetermined number of pixels removed from the line in

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the second direction; and (d) for pixels on the line, summing the spacing of the halftone dots in the search window to obtain warping displacement values for pixels along the line so as to form a series of warped brightness pattern lines extending in the first direction.

Examiner has been unable to find each and every one of these specific limitations in the prior art such that the prior art would render the limitations of independent claims 22, 28 and 30 obvious to one of ordinary skill in the art at the time of the invention.

The closest prior art references that were discovered are Lathrop (US Patent 5,097,427), Lohmeyer (6,061,477), and Smitt (5,988,504), which were cited in previous office actions. While (a) is taught by Lathrop in view of Lohmeyer, and the gray level distribution curves in (b) are taught by Smitt (figures 6 and 7 of Smitt), the full recitation of (c) and (d) are not found in the previously cited prior art, nor has Examiner found additional prior art that teaches (c) and (d) such that (c) and (d) would have been obvious to one of ordinary skill in the art at the time of the invention.

Claims 23 and 31 are considered to contain allowable subject matter at least by virtue of their dependence from claims 22 and 30, respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



06 April 2006

James A. Thompson  
Examiner  
Technology Division 2625



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